Ref: OU# 05-062

Phoenix – Goodyear Airport Area/Western Avenue Plume Community Advisory Group Meeting

Thursday, June 9, 2005 6:30p.m. to 8:30p.m. Goodyear City Hall, Room 117 190 N. Litchfield Road Goodyear, Arizona

FINAL MINUTES

<u>CAG members present</u>: Diane Krone; Susan Kagan; Thomas H. Jones, Jr.; Sam Wallick; Sheri Michele Lauritano; David Day; Bob Smith; Dr. Fred Scott

Members absent: Keith Longley

<u>ADEQ Staff in attendance:</u> Monica Mascareno, ADEQ Community Involvement Coordinator; Lou Sandoval, ADEQ Project Manager; Cathy O'Connell, ADEQ Project Manager

EPA Staff in attendance: Mary Aycock, Remedial Project Manager

Members of the public present: Kevin Murdock, CH2MHILL; Veronica Garcia, ADEQ, participating as a member of the public; Michael Kearns, Litchfield Park; Darryl Henning, West Valley View; Diane Burnett, City of Goodyear; Dino Gotsis, Burgess and Niple; Don Stoltzfus, City of Phoenix; Barney Helmick, Phoenix Goodyear Airport; Alison McGregor, Squire Sanders; Christine Romero, Arizona Republic; Robert Mongrain, ARCADIS; Jim Creedon; David Iwanski, City of Goodyear

The meeting began at 6:35 p.m.

The following matters were discussed, considered, and decided upon at the meeting:

1. Call to Order / Introduction of CAG Applicants

Monica Mascareno, ADEQ Community Involvement Coordinator, welcomed everyone, and introduced Diane Krone, CAG Co-Chair, who ran the rest of the meeting. Ms. Krone welcomed everyone as well and introduced herself. She asked all CAG members, staff members, and members of the public who were present to introduce themselves.

2. Acceptance and / or changes to February 3, 2005 CAG meeting minutes

David Day, CAG member, and Ms. Krone pointed out some minor edits to be made to the minutes.

Dr. Fred Scott, CAG member, motioned to accept the minutes with the changes suggested. Susan Kagan, CAG member, seconded the motion, and it was unanimously passed.

3. Discussion and Possible Voting on CAG Charter Modifications

Ms. Kagan moved that item III, section A of the CAG charter be modified to reflect that the CAG shall have at least nine members, instead of ten. Mr. Day seconded that motion. The motion was unanimously passed.

Dr. Scott motioned that the following statement be added to the end of item III, section A of the CAG charter: A simple majority of CAG membership will constitute a quorum. Ms. Kagan seconded the motion. The motion was unanimously passed.

Mr. Day expressed his concern about the progression, or seemingly lack thereof, of the cleanup of the sites, as he gathered from presentations during past CAG meetings. He expressed he felt the status of the cleanup of the site is unsatisfactory, when taking into consideration the amount of time that has been spent on the process. Mr. Day asked to know what responsibility was assigned to each of the entities involved in past cleanup efforts and where each went wrong.

Mr. Day added that the CAG may have failed to perform what was described in the charter, in item III, section D. He expressed that other than through the reporting of the *West Valley View*, he did not perceive that the information presented at CAG meetings had been disseminated to the public by CAG members.

Mr. Day stated that the objectives of the residents of the area and those of the company responsible for the cleanup are diametrically opposed. He expressed that a groundswell of public opinion may be influential in changing attitudes with regard to completing the cleanup. He reiterated that the CAG plays an important role in disseminating the information to the public, and the members have not performed that task in the past; he asked ADEQ and EPA staff for guidance on how to execute this task successfully.

Mr. Day also suggested that a forum be facilitated, separate from a CAG meeting, through which the CAG members can present a collaborative position on the cleanup to the public, and the public can ask questions of and discuss with the CAG members.

Ms. Mascareno interjected by stating that CAG members are not to meet outside CAG meetings, according to Arizona's open meeting law; if a quorum of members gather, it must be considered a public meeting, and a notice must be posted. This is to ensure that the public has an opportunity to hear all deliberation regarding site matters.

In response to one of Mr. Day's comments, Dr. Scott stated that he expected that the presentation that was scheduled to be given later in the meeting by Mary Aycock, EPA Project Manager, would likely include: information on a calendar of events and a timeline for future cleanup efforts for the project, who would be held accountable for performing those efforts, and what contingencies would be in place, in case those efforts are not carried out as planned.

Ms. Aycock offered that one possibility to help address Mr. Day's concerns regarding community involvement efforts may be the creation of a community involvement plan (CIP), which describes what actions will be taken to seek, document, and respond to public opinion. Ms. Aycock added that Viola Cooper, EPA Community Involvement Coordinator, possibly in conjunction with CAG and local Agency staff members, would coordinate the activities described in the CIP document. In response to Ms. Krone's inquiry about when that CIP could be created, Ms. Aycock responded that she will follow-up with her management on whether the resources could be made available for that project.

In response to questions from Mr. Day, Ms. Mascareno responded that CAG meetings are public meetings, and are intended to enable CAG members to meet to discuss issues and concerns related to a site's cleanup; CAG members are encouraged to state the concerns and issues that exist in their respective communities during these meetings.

Dr. Scott suggested that one goal of the CAG should be to try to increase the attendance of the public at CAG meetings.

Discussions ensued about how CAG members can promote and enable better communications with the public about the site.

Ms. Mascareno suggested that the next meeting include the following agenda items: (1) What is the role of the CAG and why have these meetings?; (2) Very short history of what has happened on the site; and (3) Brainstorming session on how to publicize CAG meetings and how to let the public know about what was presented at the meetings. The third topic might include a discussion on creating a new CIP.

Ms. Lauritano moved that the items suggested by Ms. Mascareno be covered on the next CAG meeting agenda. Dr. Scott seconded the motion. After some additional discussion, the motion was passed.

Ms. Mascareno asked the CAG members to bring in ideas, resources, or media outlets to the next CAG meeting for a discussion on how to better inform the community about what is going on at site.

4. Western Avenue Plume Site Update- Lou Sandoval, ADEQ Project Manager

Ms. Sandoval explained that Ana Vargas is the ADEQ Project Manager for the Western Avenue Plume WQARF site, but Ms. Sandoval would be reporting on the status of the site.

At the last meeting, Ms. Sandoval reported that the remedial investigation (RI) report was in the draft stage and was being reviewed by ADEQ. Since then, ADEQ has submitted comments to the consultants. Currently, ADEQ awaits the final draft from the consultants. The final draft RI report will be made available for public comment; a notice will be published in a newspaper, and it will be sent to the mailing list. This report will be available for review at the Avondale Public Library as well.

5. PGA South Update – Lou Sandoval

This site is undergoing a five-year review. According to CERCLA regulations, a National Priorities List site that has waste remaining in place is required to perform an assessment of the current remedy every five years. The remedy has been in place for ten years. EPA is working with CH2MHill to develop this assessment. At the next CAG meeting, members will get a report on the status of the assessment. Ms. Aycock added that the assessment report will be released to ADEQ; copies will be made available for the CAG members and will be placed in the repository at the library.

6. The CAG took a 10 minute break. The meeting came to order at 7:40 p.m.

7. Comparison of PGA-North and PGA South Issues – Mary Aycock

Ms. Aycock explained that Ms. Krone advised her that it would benefit the CAG and the public to clarify some of the distinctions between the PGA North and PGA South sites.

Ms. Aycock explained that there are several factors why the PGA South site cleanup is farther along than the PGA North site cleanup; they include the differences in the status of contamination at each site when cleanup began and the different actions that were implemented at each site.

Ms. Aycock provided a handout and explained to the CAG the following information:

<u>FEATURE</u>	PGA NORTH SITE	PGA SOUTH SITE
Lead Agency	U.S. EPA	ADEQ
Responsible Party (RP)	Crane Company	The Goodyear Tire & Rubber Company
Use of Site	Manufacturing & testing of explosives and related devices for defense & aerospace applications	Aviation manufacturing and maintenance services, and adjacent airport
Years of Active Operation	1963-1993	1943-1968 Airport 1943 – 1987 Adjacent to airport
Main Sources of Contamination	Former dry wells	Surface spills

Primary Contaminants and Current Maximum Concentrations	<u>Trichloroethene</u> (6,190 ppb in Subunit A, 104 ppb in Subunit C)	<u>Trichloroethene</u> (190 ppb in Subunit A, 100 ppb in Subunit C)
	Perchlorate (51.3 ppb in Subunit A, 8.8 ppb in Subunit C)	Chromium (450 ppb in Subunit A, 235 ppb in Subunit C)
TCE Plume Size (approx.)	Subunit A – 2 square miles Subunit C – 0.15 square miles	Subunit A – 0.5 square miles Subunit C – 0.1 square miles
Number of Monitoring Wells (approx.)	20-Subunit A 9- Subunit C	45-Subunit A 36-Subunit C (many are upper/lower nests)
Number of Extraction Wells	4- Subunit A 1- Subunit B 1-Subunit C	12-Subunit A 5- Subunit C
Number of Injection Wells	5- Subunit A	16 –Subunit A 5- Subunit C
Current Groundwater Remedy	Two GW pump-and-treat systems (Subunits A&C), using combo of ion exchange, air stripping, carbon absorption, w/reinjection/irrigation	Three GW pump-and-treat systems (Subunits A &C) using either air stripping w/reinjection or carbon adsorption w/reinjection
Flow Rates	775gpm – Subunit A/45gpm- Subunit C (+40 gpm for Subunit B)	350 gpm – Subunit A/650 gpm Subunit C (2 systems)
Years of Operation	1994-present	1990-present
Pounds TCE Removed (approx.)	36,747 pounds	5,055 pounds
Soils Remedy	Soil Vapor Extraction	Soil Vapor Extraction
Years of Operation	1994-1998 and 2004 –present	1993-1998 and 2001-2003
Pounds of TCE Removed (approx.)	9,183 pounds (1994-1998) and 725 pounds (2004 – present)	2,524 pounds (total)

A CAG member inquired why only Goodyear Tire & Rubber Company (and not the Navy/Airport) was a responsible party for the PGA South site. Ms. Sandoval and Ms. Aycock responded that Goodyear Aerospace Corporation was the prime contractor for the site, and that they were contracted by the Navy. Loral Company was also a partner on the site. The Navy and Loral Company bought themselves out of the liability, leaving the remaining Goodyear Tire & Rubber Company as the responsible party.

In response to a question from a member of the public, Ms. Aycock responded that the site standard for perchlorate for effluent discharge (groundwater treatment only) is 4ppb; this standard is currently under review based on new EPA state guidelines.

Ms. Krone commented that the information provided in Ms. Aycock's presentation illustrates the aggressive approach implemented for cleanup at PGA South, and the not-so-aggressive approach that has been implemented for the PGA North cleanup. Ms. Krone emphasized that the difference in cleanup activity is noticeable, especially since the contamination for both sites was discovered around the same time frame. She would

like to commend the efforts for PGA South, and would like to see an equal effort happen for the PGA North Site.

8. Update on Current and On-going Activities for the PGA North Site-Robert Mongrain, ARCADIS

Mr. Mongrain introduced himself and explained that ARCADIS is a contractor for Crane Company. Mr. Mongrain's presentation included a map of the site showing the extent of the groundwater contamination. He explained that groundwater that is contaminated with TCE and perchlorate, from the aquifers in Subunit A and Subunit C, continues to be extracted and treated. He also stated that groundwater monitoring indicates little change in the plume shape or contaminant concentrations since the last meeting.

There are two main groundwater treatment systems. The main treatment system extracted and treated 37.2 million gallons of water and removed 275 pounds of TCE from January 2005 through April 2005.

A perchlorate ion exchange treatment unit began full-scale operation in April 21, 2005. By April 29, 2005, the water was being re-injected into the water table. There have been seven performance monitoring events from April 21 through May 11, 2005. The results of the monitoring showed that the influent concentrations range from $12.2 - 18.1 \,\mu\text{g/L}$. The mid vessel concentration and the effluent concentration were non-detect, so the water was re-injected into the water table.

The well 33A treatment system extracted and treated 85.5 MM gallons of water and removed 90 pounds of TCE during January to April 2005.

Mr. Mongrain described on-going groundwater issues:

Conduit well investigation and abandonment work plan

There have been a number of wells at the Unidynamics site that have been out of use since the 40's and 50's. Crane Co. has taken on the task of investigating those wells to determine if there is a potential for them to act as conduits, and enable contamination that exists in the upper aquifer to get down to the lower aquifer.

The work plan was approved in early spring 2005. Some work has begun on well COG-04. ARCADIS is working with City of Goodyear (COG) to determine how to abandon that well.

EPA requested that existing aerial photographs be reviewed to determine the location of all wells in that area.

There is an investigation plan to identify locations of wells, sample the groundwater, and determine whether and how each well should be abandoned in accordance with state standards.

A next step is to do a site-wide walk-through in late June 2005, to demonstrate the locations to be investigated to EPA staff.

Investigation of well COG-02

This well is located across from the Unidynamics site and it is currently being investigated. Water quality samples are being taken while the well is pumping to determine what the concentrations are at different depths within the well.

Part of the water from the well flows to the city sewer and part of it flows to large tanks. In order to ensure that the sewer wouldn't be overrun, a sewer line cleanout was performed.

Future geophysical testing will help identify how the contamination could have migrated into the different zones. This will also help determine whether other supply wells could be at risk of contamination.

SunCor well 3B, in the northeast portion

An investigation will be conducted to determine whether this well could potentially be a conduit. In July 2005, a similar investigation to that of COG-02 will be conducted and will include water quality sampling at different depths, a sewer line cleanout, and geophysical testing.

Investigation of COG-10, at McDowell and Litchfield Road

The well is monitored monthly, and a sample from April 2005 showed that contamination was present. The COG sampled it as well and took the well out of service. ARCADIS has been working with the COG to find an alternate water supply. An investigation to include water quality sampling and geophysical testing, similar to that of COG-02, will be conducted for this well.

Mr. Mongrain stated that ARCADIS developed a site groundwater flow model that incorporates all existing site information and can be used to provide insight into the geologic conditions that affect groundwater flow, assist in defining plume boundaries, evaluate and incorporate new data as it is collected, and assist in optimization of the remedial systems to capture contaminants. On June 20, 2005, ARCADIS will submit a response to EPA's comments on this model. Continued revisions to the draft groundwater flow model will be on-going, and the next release of the model is anticipated to happen in August of 2005.

ARCADIS has negotiated a groundwater investigation work plan with the agencies and several stakeholders to be implemented in 2005. The proposed schedule for work is as follows: work plan and quality assurance project plan approval in mid to late July, field work to begin in early August; middle alluvial unit (deep) monitor wells 1M and 28M to

be drilled on site first; and coordination with COG engineering for city right-of-way access and traffic control permits for offsite wells will follow. Mr. Mongrain displayed a graphic of a map showing the locations of groundwater investigation for this plan.

Mr. Mongrain described the objectives of a source area investigation for main dry wells as follows: further characterize the main dry wells areas as a source of TCE and potential source of perchlorate; characterize the equilibrium between TCE in soil vapor and TCE in groundwater; retrofit the soil vapor extraction (SVE) system; and install an in-situ reactive zone (IRZ) injection well to facilitate IRZ pilot studies and evaluate in-situ remedies for both TCE and perchlorate. Mr. Mongrain displayed a graphic illustrating the locations of the main dry wells to be investigated.

Mr. Mongrain described a proposed field pilot test for zero-valent iron, and stated that a schedule for this would be as follows: baseline sampling in mid June 2005; a tracer study in June/July 2005; a second baseline sampling in mid July 2005; a technical memorandum in late July 2005; zero-valent iron (ZVI) injection in late July 2005; monitoring from July through December 2005; and a summary report in February of 2006. Mr. Mongrain displayed a graphic illustrating the scope of this pilot test.

Mr. Mongrain outlined some details of the SVE system operation

- Volatile organic compound (VOC) contaminant mass removal
 - o During the 1st quarter of 2005, 10 pounds of total VOCs were removed; 9 pounds of that was TCE and the rest was acetone and isopropanol.
- Since the April 2004 restart, 1379 pounds of total VOCs were removed; 725 pounds of that was TCE and 654 pounds of that was acetone/isopropanol.
- Changes, enhancements, and optimization to the system
 - o Testing of new SVE wells SVE-7, 8, and 9 is scheduled in August 2005
 - o ARCADIS is adding a fire suppression system to the treatment system to address concerns for the potential of a carbon bed fire that should be implemented by July 30, 2005. Precautions will include:
 - Carbon monoxide monitoring
 - Carbon dioxide extinguisher system

Mr. Mongrain outlined some details of the air quality sampling that was conducted for three buildings at the site.

- September 2003 sampling
 - O Maximum TCE concentration was 0.46 μg/m³
 - O Maximum PCE concentration was 0.74 μg/m³

- o The American Conference of Governmental Industrial Hygienists threshold limit for a worker during a work day is 268 mg/m³. The findings were 100,000 times less than this limit.
- o TCE and PCE concentrations that were found in the indoor air do not signify an unsafe work environment
- o EPA requested a winter sampling event
- February 2005 sampling
 - o Air quality sampling event was completed the week of February 7, 2005
 - o Air quality samples were collected in the same locations as the September 2003 sampling event when possible
 - Ambient outdoor air quality samples were collected from three new locations
 - o One air quality sample was collected near the main groundwater treatment facility exhaust
- Results for air quality sampling conducted in February 2005
 - O Maximum TCE concentration outdoors at MTS was 0.65 μg/m³
 - ο Maximum PCE concentration outdoors at Yuma Road was 0.75 μg/m³
 - O Average TCE concentration indoors was 0.16 μg/m³
 - O Average PCE concentration indoors was 0.39 μg/m³

9. Questions from the CAG-All Project Staff

In response to a question from Ms. Krone, Mr. Mongrain explained that the pump and treat system is a mechanism that is used for containment, and that actual cleanup will take several years, if not decades. He added that ARCADIS is working with COG to ensure that the water supply for Goodyear is free of contamination.

10. Call to the public

In response to a question from an audience member regarding whether a health effects or epidemiology test had been conducted for the site, Ms. Sandoval responded that a risk assessment of the Goodyear area was conducted by the Arizona Department of Health Services, in conjunction with the Agency for Toxicological Substances and Disease Registry. The report, which was released in 2000, showed no higher-than-normal incidences of cancer in the areas around the Unidynamics site or the Phoenix-Goodyear Airport.

In response to a question from a CAG member, Ms. Aycock explained that the primary drinking water standard for TCE is 5ppb, and the goal for this project is to bring down the groundwater levels to 5ppb. She added that there is a health-based guideline that the state uses for perchlorate which is 11 ppb; there is currently no drinking water standard for perchlorate.

In response to a CAG member's inquiry about how to see the purchase records for the site, Ms. Aycock stated that she would make copies of those records available to that CAG member, if he submits a request to her.

11. Future Meeting Plans / Agenda Discussion

The next CAG meeting is tentatively scheduled for August 11, 2005.

12. Adjournment

Ms. Kagan moved to adjourn the meeting. Mr. Day seconded that motion. The meeting was adjourned at 8:54 p.m.